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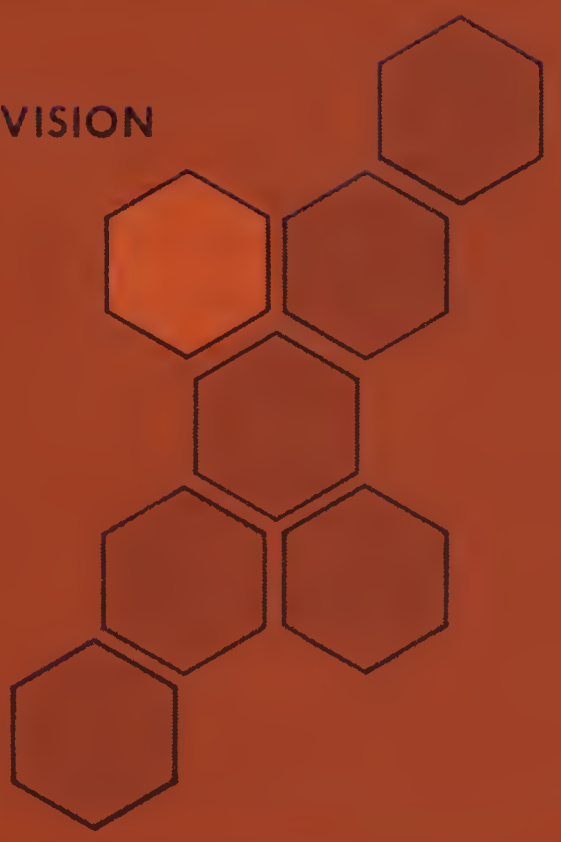

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INFLUENCE OF SIZE ON OTHER FARM CHARACTERISTICS IN U.S. GRAIN GROWING REGIONS

by

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A survey conducted by USDA in 1975 was designed to estimate 1974 costs of production (COP) in major grain and cotton regions. Counties included in the survey were primarily those with 10 percent or more of their total land area in cropland. The lower limit of farm size permitted in the sample, ranged from 50 cropland acres in the Southeast, to 400 cropland acres in the Northwest; the upper limit of farm sizes ranged from 5,000 to 10,000 cropland acres, Southeast to Northwest.

The data gathered in the COP survey were stratified, with cropland acreage as the basis for stratification. For each of 40 subregions, the data were divided into one-third of the farms in each of three size categories. Table 1 gives the range of cropland acreage for each size group in each subregion; it also gives the number of observations in each cell. The boundaries of the subregions are shown in Figure 1.

The acreage range was relatively narrow for the small farms, wider for the medium farms, and much wider for the large farms. The wide range in the latter group resulted because very large farms--with up to 10,000 cropland acres--were permitted to enter the sample.

The contribution to total production and sales by each size group is not easily determined. The initial sample had been selected with incomplete knowledge of the existing farm size distribution. But an

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estimate of impact by each size designation is possible by comparing the three COP survey size groups with three similar size groups delimited in the 1974 Census of Agriculture. The large, medium, and small groups defined in table 1 were found to be comparable to three farm groups (defined by the Census) with sales of $100,000 and over (large), $40,000 to $99,999 (medium), and $20,000 to $39,999 (small). Table 2 shows the degree of comparability which is found between the Census and Survey sets of farms.

In order to hold down the size of table 2, only 5 grain producing states were considered. This particular selection was intended to typify a cross section of the important grain producing regions. In the table, under "Ag Census", a single figure represents the whole state; the associated 2 to 4 figures listed under "COP Survey" give the mean acreage of the several farm sizes in corresponding survey subregions. There is some overlapping, since subregion boundaries can go beyond state boundaries.

In Washington, the survey mean acreages turned out to be larger than the corresponding census mean acreages; in the other 4 states, the reverse was true. Otherwise, there was a surprising degree of consistency between the 2 sets of data. Hence, it seemed permissible to let census proportions of production and sales serve as broad estimates for the corresponding survey groups of farms.

The next pertinent question is: How much of each state's total grain production is covered under the Standard Industrial Classification "Cash Grain Farms?" In Washington, these farms produced 88 percent of that

State's wheat; in North Dakota it was 87 percent; and in Kansas 83 percent. In Iowa, the same classification "cash grain farms" produced 59 percent of the State's corn, while in Indiana the comparable figure was 76 percent of the corn. Substantial amounts of the corn produced in the latter 2 States was raised on other farm types which feed much of the grain they produce.

Next we can determine the proportion of grain sales made by each of the 3 Census groups. In Washington, the share of all grain sales by the large farms was 69 percent; by the medium farms it was 25 percent; and by the small farms it was 5 percent. In the other 4 states, the percentages were largest in the medium size group, as follows:

State	Large farms	Medium farms	Small farms
	---Percent---		
North Dakota	29	42	20
Kansas	37	34	17
Iowa	32	44	17
Indiana	35	35	16

As a generalization, we can say that large farms sold about two-thirds of all the grain in Washington State; the medium and small farms marketed nearly all of the remaining grain sold by cash grain farmers. In other words, cash grain farms with less than $20,000 in gross sales marketed very little of the total grain sold. The California situation would likely be similar to that of Washington.

In the Great Plains and Corn Belt, the large farm's share was only about one-third of all grain sold by cash grain farms; the medium and small farms accounted for about 50 to 60 percent of total grain sales.

Costs of Production

The initial COP survey was designed to determine the production costs of 10 major crops. But after the farms in each subregion had been divided into 3 size groups (leaving only a third as many observations per cell), the categories often lacked an adequate number of observations with regard to specified crops. Nevertheless, a valid comparison among farm size groups was considered possible for corn in most of the eastern half of the Nation, and for wheat in most of the western half of the Nation. The Eastern Corn Belt was also analyzed for wheat.

The new "thinness" in each cell made it less possible to "average out" extreme entries wherever these occurred (tending to confound the true effects). Hence, the present results are necessarily more ragged than the ones published in the Senate Committee Print Costs of Producing Selected Crops in the United States-1974, in which all farm sizes were averaged together.

Costs of producing corn are covered in table 3 with a tally of variable costs per acre and per bushel by farm size. Only those regions and subregions were included where corn for grain on dryland was a significant crop. Variable costs included labor, power and equipment, materials, custom services, and interest on operating capital.

Variable costs per acre tended to increase with an increase in farm size--particularly with respect to material inputs. Value of seed went up only moderately with farm size, but fertilizer and other chemicals increased substantially. Fertilizer on small farms averaged $26 per acre; on medium farms $29 per acre; and on large farms $35 per acre. Herbicides plus insecticides averaged about $6 on small, $8 on medium, and $10 on

large farms. Unfortunately, 1974 was a bad year in the Corn Belt for realizing a proper response to higher inputs. The wet spring, dry summer, and early frost all hampered the yield response one might otherwise have expected from the higher inputs on the larger farms. Thus, when costs per bushel were calculated, particularly in the Western Corn Belt, these costs tended to average higher for the large farms than for the smaller farms. In the Southeast, on the other hand, where weather conditions in 1974 were more nearly normal, per bushel costs were lower for large farms than for medium and small farms.

Wheat was the other crop where a relatively valid cost comparison could be made among size groups. Again, only those regions and subregions were included where wheat was a predominant crop. The summary results of variable costs for growing wheat are shown in table 4.

Practices pertaining to wheat vary widely because the crop is grown in conditions ranging from a semiarid climate in the West to a humid climate in the Eastern Corn Belt. Other aspects of wheat also contrast sharply with corn: Some wheat is planted in the fall, some in the spring; some is planted on summerfallow, some on recrop ground; there are several distinct classes of wheat and all respond differently to given influences. With this lack of homogeneity in the "wheat" covered in table 4, the results are inclined to be less determinate, and analytic results seem more tentative than the results of the corn analysis based on the previous table.

The amount of fertilizer applied per acre of wheat ranged from $0 to $28 going from the dry West to the humid East. But among the size groups, the differences in fertilizer application for wheat were smaller than for

corn--$4.83/acre for small farms; $6.55/acre for medium farms; and $7.69/acre for large farms. The direct correlation between farm size and fertilizer use was offset by the indirect correlation between size and 2 other important inputs--labor and seed. Small farms used 20 percent more labor and 23 percent more seed per acre than the large farms.

The large farms in the semiarid parts of the Great Plains were the only group of farms capable of holding variable costs below $30 an acre. Other subregions of the Great Plains and the Pacific Northwest had costs between $30 and $40 per acre. Eastern Kansas, the Texas Blackland, and Northern Missouri had costs between $40 and $50. The Eastern Corn Belt, the Red River Valley, and the Sacramento Valley averaged $50 to $60 per acre.

Per bushel costs ranged even wider--from less than 90 cents in Eastern Nebraska (where the wheat had matured by the time the severe drought had set in) to $4.69 in the Texas High Plains where drought had been fully reflected in the wheat yields.

Other Cost Analysis

The dollar values attached to most cost components were determined by engineering formulas--with the help of physical input information obtained from the survey. But the dollar value of 2 significant components--fertilizer and herbicides--was obtained directly from respondents' estimates. These values are listed by size of farm for 4 grain crops. tables 5 through 8 provide information for corn, sorghum, barley and wheat.

Patterns are hard to derive from the results shown in these tables. But as observed earlier, the number of observations often were insufficient to attenuate the effects of oddball entries--the extreme entry which creeps

in through error or chance. Hence, the raggedness of the results. And thus, for example, we should not rely on irrational results such as that in the Sacramento Valley, where large farms indicated use of only 40 percent as much fertilizer on their corn as did the small farmers. The actual situation is probably quite different.

Many relevant variables were not taken into account in this analysis where only 2 factors could be considered at one time, nor were effects of the other factors controlled. For example, the percent of acres irrigated, or the amount of irrigation water applied, had a substantial bearing on yield results. Yet these factors could not be accounted for in tables 5 through 8. The limited number of observations did not permit their effects to be reflected in a cross-classification type of analysis.

In general, it might be said that the amount of fertilizer applied is pretty much a function of the availability of moisture expected for the growing crop. The relative profitability of the crop to which fertilizer is applied is also a factor. Thus, corn tends to receive more fertilizer than sorghum and wheat more than barley, as a general rule.

Only corn received a substantial amount of herbicides, particularly in the Eastern Corn Belt and in the Southeast. The other 3 crops received $2 an acre or less, except for a slightly higher rate applied to wheat in the Palouse area of Washington and to sorghum in Eastern Kansas.

Seed is another sizeable input required for raising crops. Where home grown seed was used, the value was based on the market price for grain at the time of seeding. An additional charge was added to cover seed cleaning and treatment expenditures.

Where seed was purchased, the price used was the purchase price given by the farmer. Seed purchases are made when home grown seeds are considered less profitable, or when new varieties are being introduced into the farming operation. Tables 9 through 12 give the proportion of total corn, sorghum, barley, and wheat seed which had been purchased to produce the 1974 crop.

Table 9 shows that nearly all seed corn in the Corn Belt was purchased. GP-10 (Central Nebraska) is regarded here as part of the Corn Belt. Similarly the Coastal Plains of the Southeast also bought nearly all their seed. The remainder of the Southeast purchased 50 to 70 percent of their seed. The subregions west of the Corn BeIt used home grown seed for half to nearly all of their seed needs.

Table 10 shows that the subregions of Texas and Eastern Kansas had the highest purchases of sorghum seed--ranging from 75 to 95 percent of total used. Several other important sorghum subregions had purchased roughly half their 1974 seed. The remaining subregions which planted relatively small amounts of sorghum used home grown seed for two-thirds to all their needs.

Table 11 shows that in the case of barley, seed purchases exceeded home grown seed in only one area--the Washington Palouse. Southeastern Idaho, the San Joaquin Valley, Arizona, and the Red River Valley purchased around 40 percent of their needs. The remaining areas purchased only 5 to 20 percent of the seed they used.

Table 12 shows that in the case of wheat, the Western States were high in the proportion of seed they had purchased. The only other subregion

buying more than half its seed wheat was the Red River Valley. The remaining subregions ranged from half to a negligible amount, in the proportion of seed they had purchased.

For all 4 grains, the size of farm did not seem to be a significant variable in the proportion of seed that was purchased.

Other Farm Characteristics

The main objective of the survey was to determine production costs, but other aspects of farming were also revealed. One investigation led into the disposition of grains: Determining the ratio of cash grain sales to amounts which were fed on the farms where produced. Table 13 shows that in the Corn Belt and Southeast, up to 50 percent and more of the grains were not sold but were fed right on the farm. By contrast, in the region west of the hundredth meridian the farmers sold nearly all of the grain they had produced.

Table 13 may leave the impression that farm animals play a small role in western agriculture because an insignificant portion of the grain was fed where produced. But when examining average amounts paid out for purchased feed (table 14), it is apparent that on at least some western farms, farm animals make up a substantial part of the business.

Some outlays for feed probably were for winter maintenance of ranch animals. But in certain subregions (Western States and Western Great Plains), the size of payments for feed were so large that we must assume a connection with feedlot cattle finishing. This line of reasoning is further supported in table 15 where it is revealed that relatively large sums were paid out for the purchase of feeder livestock.

Besides purchases for the feedlot, large numbers were bought to serve as stockers for grazing winter wheat and some other cover crops. The large purchases made for GP-1 and GP-4 farms, no doubt, were largely for stockers to run on winter wheat. In the southern third of the Nation, a number of other crops are also winter grazed.

Capacity for Grain Storage

The various capacities for on-the-farm storage are given in table 16. They show a great deal of variation among the regions as well as within the regions. The largest variations were within the Texas-Oklahoma area. The area with the largest amount of farm storage was the Northern Plains, including Nebraska but not Kansas. The Corn Belt ranked second, and this region showed the least amount of variability among subregions, especially in the Western Corn Belt.

Table 17 gives the total outlays for rented grain storage. These outlays generally consisted of payments by farmers to country elevators. The largest amounts paid out for storage were in the Palouse part of the Pacific Northwest (W-5), parts of the Central Plains (GP-1, GP-2, and GP-4), the cash grain area of the Corn Belt (NC-9), and the western part of the Mississippi Delta (SC-2).

Capacity for Fuel Storage

A measure of on-the-farm fuel storage was obtained for diesel, gasoline, and LP gas. Tables 18, 19, and 20 give the gallon capacity of on-farm storage for these fuels.

The Western States store the largest amount of fuel because their larger farms consume more, and because of the more intensive farming

practiced in California and Arizona. In the other regions, fuel stored is pretty much a function of farm size, relative fuel prices, ready availability of each type of fuel, and amounts used for special purposes such as irrigation, grain drying, etc.

A check on shop and shop related equipment showed that Western States and Western Great Plains operators appear more inclined to repair their own machinery. Table 21 shows their shop type of investments were greater than for farms further to the east. These western farms also have a higher investment in farm machinery. This same pattern was found within subregions--amounts invested in shop and related equipment tend to vary with farm size, and therefore with the size of the machinery complement.

Operator Characteristics

In nearly all cases, the person interviewed had chief management responsibility for the farming operation. The bulk of these operators identified farming as their chief occupation. The number of weeks out of the year not devoted to the farm are given in table 22. Operators even in the small farm category spend less than half their time on off-farm activities. However, small farmers in Southern Michigan (NC-10) came close to spending 50 percent of their time off the farm--23 weeks out of the year.

We can conclude that part-time farms were not uncommon in the survey sample. Even the medium size farms had operators in some regions who reported substantial off-farm employment. The off-farm opportunities were greatest in the Southeast, the Eastern Corn Belt, Texas, and the Central Kansas-Oklahoma area. A more deliberate screening of the sample would have

been required if only full-time operators were to be included among those interviewed.

The education of the operators is given in table 23 and shows that operators in the Western States averaged nearly one year beyond high school. The operators in the Southeast averaged the least education--a level about midway between grade school and high school graduation. The operators at the northern and southern ends of the Eastern Great Plains also averaged less education than most others. For the U.S. as a whole, the small farmers averaged 10.7 years of schooling; the medium 11.2 years, and the large 12.0 years.

Other studies have supported the findings that, on an average, large farm operators are better educated and average somewhat younger than operators of smaller farms. Younger operators tend to inherit substantial amounts of capital which they can apply to their farming operations. Sometimes they also have an interest in business ventures located in the same general area as their farm.

Small and medium farm operators, on the other hand, tend to have less capital, as well as less education and managerial capacity. There are also more operators in this group who are semi-retired; hence, the farm occupies their time and plans less fully than the operators whose planning horizons extend over decades.

Tenure patterns, covered in table 24, show a generally greater proportion of ownership among the small farmers. But such a pattern is less apparent in subregions where cash grain production is emphasized. For example, even the small farmer seems to rent up to half of his land in the

drier parts of Eastern Washington-Oregon (W-4); the drier parts of Kansas-Colorado-Oklahoma-Texas (GP-1); Central Kansas (GP-2 and GP-4); the rice area of Texas (SC-4); and the cash grain area of the Corn Belt (NC-9). Cash grain farming, of course, requires relatively more land, and the incentive is to rent where land ownership is limited by lack of capital and for other reasons.

Tenure is also a function of geography, religion and ethnicity of the settlers, and the degree to which farm enlargement has progressed in any given area. Thus, with the passage of time, ownership may shrink in the Northern Plains and Southeastern Idaho. These areas were settled more recently than others in the study.

Remarks

The foregoing discussion is based on a subclassification or cross classification type of analysis. This method of analysis is concerned with the relationship between a dependent variable (e.g. variable costs) and usually two cross-classifying independent variables (e.g. farm size and geographic location).

Since there are normally several important factors which influence costs, there is need for a procedure that studies the influence of several independent variables simultaneously. The cross-classification system can serve in multifactor analysis as well as in 2 factor analysis if a large number of observations are available. But there is a practical limit to the number of observations which surveys on production costs can collect, in view of the high cost of sample surveys and the task of getting the cooperation and forbearance of respondents.

A multivariate analysis of this set of data is being considered at this time. It is a technique which not only allows for a simultaneous consideration of several factors in 1 operation, it also permits individual examination of 1 factor while the influence of other factors is controlled. Failure to control the effects of certain interrelated factors when examining the effect of a particular factor can cause parameter estimates to go wide of the mark. Also, the errors of observation in this survey, as in other similar surveys, can distort the estimates of effects being measured.

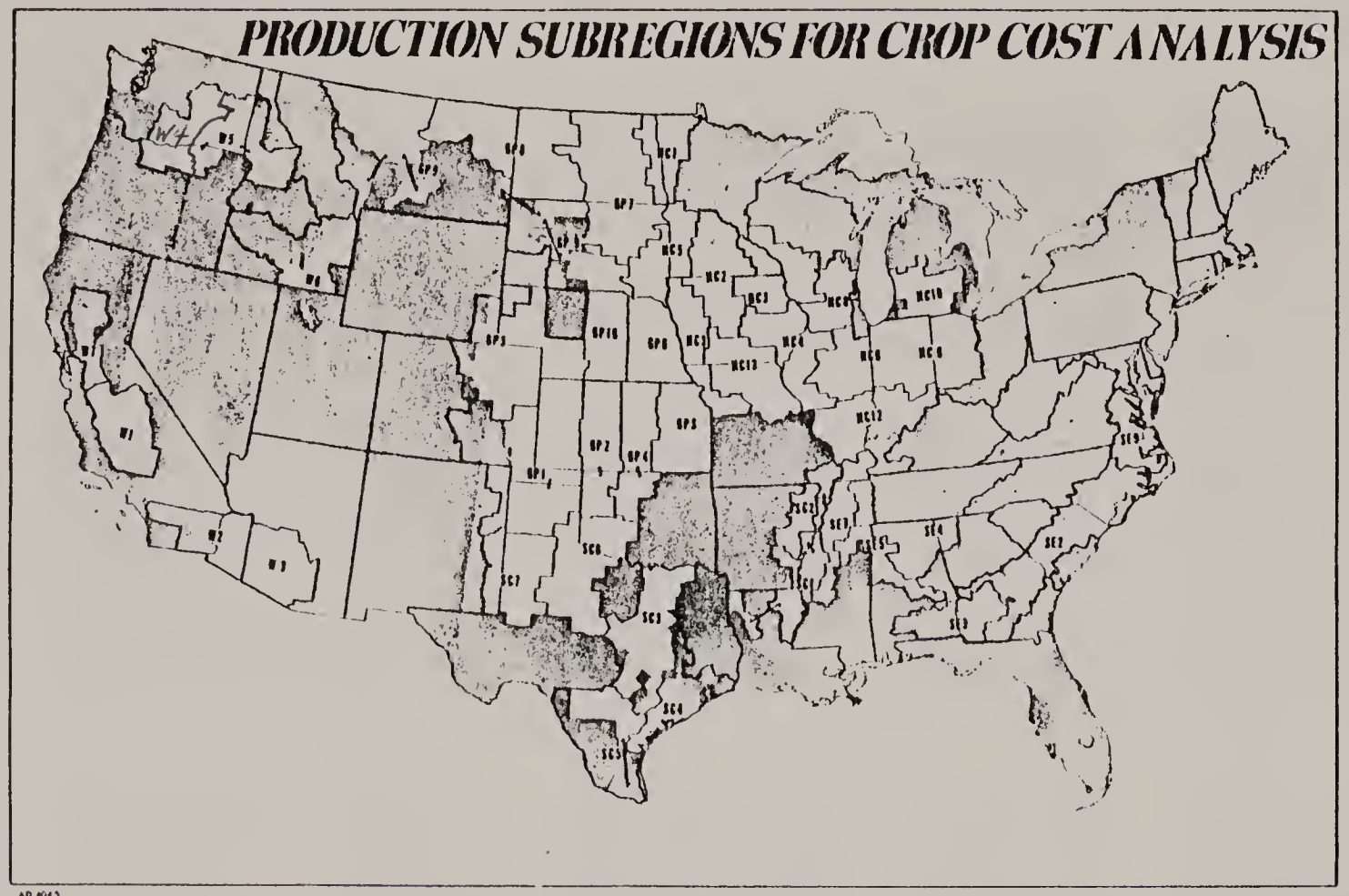

Figure 1

Table 1.--Range of cropland acreages and observations per cell on small, medium, and large farms in specified subregions of the U.S. 1974

Region and subregions	Small farms		Medium farms		Large farms	
	Acreage range	No. of obs's	Acreage range	No. of obs's	Acreage range	No. of obs's
Western States						
W-4	400-860	13	861-1,530	13	1,531-4,510	14
W-5	400-750	31	751-1,499	31	1,500-5,000	32
W-6	200-340	26	341 - 800	26	801-9,836	25
W-7	250-681	23	682-1,175	23	1,176-5,000	23
W-1	280-536	22	537-1,113	22	1,114-4,220	21
W-2	300-828	12	829-1,742	12	1,743-4,440	12
W-3	280-579	12	580-1,240	11	1,241-3,300	11
Western Great Plains						
GP-9	400-761	41	762-1,300	40	1,301-6,200	41
GP-8	400-678	45	679-1,099	46	1,100-5,240	41
GP-5	200-550	41	551 - 950	41	951-5,900	42
GP-1	300-798	37	779-1,600	36	1,601-4,380	37
SC-7	150-600	36	601-1,000	36	1,001-2,640	35
SC-6	150-329	36	330 - 560	35	561-2,300	
Eastern Great Plains						
GP-7	300-527	71	528 - 959	71	960-6,450	70
NC-1	200-400	42	401 - 779	42	780-3,229	42
GP-10	200-277	22	278 - 421	22	422-1,999	23
GP-2	200-449	39	450 - 910	39	911-4,250	40
GP-4	200-393	41	394 - 625	41	626-1,630	40
GP-3	100-248	31	249 - 429	31	430-2,600	30
SC-3	100-199	28	200 - 376	28	377-2,070	30
SC-5	100-199	31	200 - 620	30	621-4,360	30
SC-4	100-250	21	251 - 500	21	501-2,500	21
Western Corn Belt						
NC-5	100-273	53	274 - 425	53	426-1,520	53
NC-2	100-220	56	221 - 360	55	361-1,355	53
GP-6	150-240	37	241 - 409	36	410-1,426	37
NC-3	100-215	50	216 - 346	50	347-1,900	49
NC-13	100-200	43	201 - 381	43	382-2,670	43
Eastern Corn Belt						
NC-7	100-167	44	168 - 282	44	283-1,705	43
NC-4	100-193	51	194 - 347	51	348-1,528	52
NC-8	101-175	28	176 - 299	28	300-1,850	28
NC-10	100-190	19	191 - 348	19	349-2,605	20
NC-9	100-250	61	251 - 449	59	450-1,742	59
NC-12	100-205	39	206 - 350	39	351-1,020	40
Mississippi Delta						
SC-2	146-449	25	450 - 800	25	801-3,257	25
SE-7	50-229	21	230 - 500	21	501-1,950	20
SC-1	100-400	40	401 - 749	38	750-4,800	38
Southeast						
SE-5	46- 94	13	95 - 170	11	171-1,120	11
SE-4	50-148	12	149 - 338	12	339-2,100	12
SE-9	38-126	24	127 - 252	23	253- 875	23
SE-2	50-100	46	101 - 200	37	201-1,900	42
SE-3	50-150	24	151 - 350	27	351-1,500	25

Table 2.--Average cropland acreage per farm by size of farm in specified States or specified subregions

State and subregions representing the State	Small farms		Medium farms		Large farms	
	Ag Census	COP survey	Ag Census	COP survey	AG Census	COP survey
Washington	498		927		2,071	
W-4		592		1,226		2,695
W-5		565		1,061		2,880
North Dakota	655		1,028		1,916	
GP-8		550		857		1,875
GP-7		409		703		1,662
NC-1		302		567		1,382
Kansas	466		783		1,628	
GP-1		535		1,133		2,687
GP-2		309		673		1,476
GP-4		299		486		918
GP-3		168		327		690
Iowa	196		329		832	
NC-3		162		276		646
NC-2		159		283		565
NC-4		140		264		545
Indiana	203		367		764	
NC-9		174		343		749
NC-12		156		278		609

Table 3.--Variable costs in producing corn for grain by farm size in specified subregions on nonirrigated land of the Corn Belt and Southeast

Region and subregions	Small farms		Medium farms		Large farms	
	Per acre	Per bushel	Per acre	Per bushel	Per acre	Per bushel
	Dollars					
Western Corn Belt						
NC-5	62.02	1.51	61.49	1.35	73.23	1.69
NC-2	96.17	1.04	92.17	0.97	91.82	1.02
GP-6	54.39	1.87	70.19	2.78	77.99	3.08
NC-3	75.93	1.17	77.18	1.34	87.53	1.56
NC-13	70.89	1.39	76.68	1.17	115.23	1.77
Eastern Corn Belt						
NC-7	96.37	1.08	91.77	1.13	99.13	1.08
NC-4	96.40	1.14	104.12	1.14	103.78	1.09
NC-8	83.80	1.13	98.61	1.51	114.48	1.43
NC-10	75.53	1.28	77.20	1.07	80.06	1.29
NC-9	87.93	1.20	96.91	1.14	102.99	1.24
NC-12	97.74	1.25	89.64	1.24	93.04	1.15
Southeast						
SE-7	118.62	1.77	87.43	1.20	80.69	1.02
SE-5	105.59	1.73	101.27	2.44	97.61	1.29
SE-4	80.79	1.45	92.15	2.11	72.01	1.73
SE-9	119.25	1.42	123.02	1.56	123.97	1.38
SE-2	96.36	1.39	93.77	1.37	99.47	1.41
SE-3	94.26	2.00	92.20	2.30	86.33	1.72

Table 4.--Variable costs in producing wheat by farm size in specified subregions on nonirrigated land in the Western States, Great Plains, and Eastern Corn Belt

Region and subregions	Small farms		Medium farms		Large farms	
	Per acre	Per bushel	Per acre	Per bushel	Per acre	Per bushel
	Dollars					
Western States						
W-5	46.48	0.98	41.76	0.96	35.97	0.93
W-6	31.99	1.52	41.05	1.97	39.50	2.09
W-7	63.52	1.43	65.15	1.23	50.05	1.12
Western Great Plains						
GP-9	37.74	1.17	32.44	1.15	33.71	1.15
GP-8 (sp. wheat)	31.13	1.68	32.50	1.57	28.95	1.40
GP-5	32.24	1.12	32.86	0.99	26.47	0.91
GP-1	31.87	1.81	33.22	1.44	28.41	1.13
SC-7	42.12	4.69	29.84	2.96	42.11	4.34
Eastern Great Plains						
GP-7 (sp. wheat)	33.28	1.97	37.20	2.12	37.22	2.23
NC-1 (sp. wheat)	53.85	2.12	51.30	1.76	54.02	1.90
GP-10	35.24	1.01	50.09	1.47	31.39	0.87
GP-2	32.61	1.51	34.53	1.34	31.59	1.30
GP-4	38.83	1.51	35.68	1.29	41.76	1.50
GP-3	45.62	1.65	43.14	1.51	42.63	1.45
SC-6	39.09	2.28	37.41	2.10	35.17	1.93
SC-3	40.25	2.66	46.30	2.63	45.07	2.60
GP-6	35.98	0.89	37.06	0.89	35.32	0.92
Eastern Corn Belt						
NC-13	51.34	2.18	52.23	1.87	42.54	1.55
NC-12	50.05	1.62	51.59	1.86	53.53	1.82
NC-9	58.62	1.31	52.99	1.18	53.73	1.29
NC-10	59.50	1.50	54.55	1.48	56.34	1.37

Table 5.--Per acre expenditure on fertilizer and herbicides on the 1974 corn crop by size of farm and subregion (expenditures are rounded to nearest dollar)

Region and subregions	Small farms		Medium farms		Large farms	
	Fert.	Herb.	Fert.	Herb.	Fert.	Herb.
	Dollars					
Western States						
W-7	20	1	15	2	8	2
Western Great Plains						
GP-5	12	2	12	2	9	1
GP-1	3	1	6	2	14	3
Eastern Great Plains						
GP-7	1	0	2	1	2	1
NC-1	1	0	2	0	2	1
GP-10	16	3	13	2	29	3
GP-3	9	3	10	4	11	4
SC-3	2	0	3	0	1	0
Western Corn Belt						
NC-5	12	2	15	3	16	3
NC-2	25	4	32	4	31	5
GP-6	9	2	13	3	18	4
NC-3	20	4	33	7	25	7
NC-13	14	5	23	7	31	8
Eastern Corn Belt						
NC-7	28	6	30	7	33	7
NC-4	25	6	28	6	34	8
NC-8	23	6	35	6	34	9
NC-10	18	6	21	7	29	8
NC-9	30	5	34	6	43	7
NC-12	25	6	28	5	32	6
Southeast						
SE-7	13	2	19	3	19	4
SE-5	29	2	28	2	15	2
SE-4	25	9	17	2	19	2
SE-9	42	9	43	8	46	8
SE-2	36	3	38	4	42	4
SE-3	34	2	35	2	33	4

Table 6.--Per acre expenditure on fertilizer and herbicides on the 1974 sorghum crop by size of farm and subregion (expenditures are rounded to the nearest dollar)

Region and subregions	Small farms		Medium farms		Large farms	
	Fert.	Herb.	Fert.	Herb.	Fert.	Herb.
	Dollars					
Western States						
W-7	5	1	7	1	10	1
W-1	3	0	2	0	5	0
W-2	0	0	3	0	5	0
W-3	1	0	1	1	7	0
Western Great Plains						
GP-1	2	1	4	1	6	2
SC-1	10	2	11	2	5	1
Eastern Great Plains						
GP-10	5	1	2	1	3	1
GP-2	2	1	5	2	4	2
GP-4	4	1	5	1	7	1
GP-3	13	3	15	3	16	5
SC-6	0	0	0	0	3	0
SC-3	7	0	11	1	13	2
SC-5	6	0	8	1	8	1
SC-4	15	1	15	1	15	2
Western Corn Belt						
GP-6	6	2	3	1	6	2
Mississippi Delta						
SC-2	1	0	5	1	3	1

Table 7.--Per acre expenditure on fertilizer and herbicides on the 1974 barley crop by size of farm and subregion (expenditures are rounded to the nearest dollar)

Region and subregions	Small farms		Medium farms		Large farms	
	Fert.	Herb.	Fert.	Herb.	Fert.	Herb.
	Dollars					
Western States						
W-4	0	0	0	0	1	1
W-5	4	2	3	1	4	1
W-6	6	1	11	1	7	1
W-7	1	0	2	1	1	0
W-1	5	0	6	0	14	1
W-2	0	1	1	0	2	0
W-3	15	0	4	0	11	0
Western Great Plains						
GP-9	1	1	9	0	3	1
GP-8	0	0	1	0	1	2
Eastern Great Plains						
GP-7	1	0	4	0	8	1
NC-1	4	1	8	1	13	2
NC-5	1	0	1	0	2	0

Table 8.--Per acre expenditure on fertilizer and herbicides on the 1974 wheat crop by size of farm and subregion (expenditures are rounded to the nearest dollar)

Region and subregions	Small farms		Medium farms		Large farms	
	Fert.	Herb.	Fert.	Herb.	Fert.	Herb.
	Dollars					
Western States						
W-4	14	2	10	2	6	2
W-5	12	3	9	3	9	3
W-6	13	1	14	1	12	2
W-7	10	2	9	2	15	1
W-1	4	0	2	0	9	0
W-2	15	1	22	1	17	2
W-3	10	0	6	0	19	1
Western Great Plains						
GP-9	3	1	3	1	4	1
GP-8	2	1	2	1	3	1
GP-5	2	0	3	1	2	0
GP-1	3	1	4	3	6	1
SC-7	4	0	6	0	4	0
Eastern Great Plains						
GP-7	4	2	5	1	6	1
NC-1	9	1	12	1	16	2
GP-10	4	0	3	0	3	0
GP-2	5	0	6	0	7	1
GP-4	8	0	8	0	11	0
GP-3	10	0	13	0	14	0
SC-6	4	0	4	0	4	0
SC-3	4	0	5	0	8	0
Western Corn Belt						
GP-6	4	0	3	0	5	0
NC-13	2	0	3	0	8	0
Eastern Corn Belt						
NC-4	3	0	2	0	6	0
NC-10	12	0	11	0	19	0
NC-9	13	0	11	0	14	0
NC-12	14	0	20	0	28	0
Mississippi Delta						
SC-2	6	0	11	0	11	0
SE-7	1	0	9	0	12	0
SC-1	8	0	26	0	16	0
Southeast						
SE-9	9	0	10	0	13	0
SE-2	2	0	7	0	10	0
SE-3	2	0	0	0	6	0

Table 9.--Proportion of seed corn which was purchased (rather than home grown) by size of farm and subregion

Region and subregions	Small farms	Medium farms	Large farms	All farms
Western States				
W-7	0.30	0.57	0.39	0.42
W-1	0.05	0.04	0.00	0.03
Western Great Plains				
GP-9	0.29	0.07	0.02	0.13
GP-5	0.59	0.37	0.36	0.44
GP-1	0.14	0.33	0.49	0.32
Eastern Great Plains				
GP-7	0.23	0.22	0.23	0.23
NC-1	0.02	0.14	0.07	0.08
GP-10	0.77	0.86	0.96	0.87
GP-3	0.48	0.47	0.48	0.48
SC-3	0.32	0.27	0.04	0.21
SC-4	0.19	0.24	0.05	0.18
Western Corn Belt				
NC-5	1.00	0.98	0.92	0.97
NC-2	0.96	1.00	1.00	0.99
GP-6	0.73	0.90	0.88	0.84
NC-3	0.98	1.00	1.00	0.99
NC-13	0.90	0.94	0.97	0.94
Eastern Corn Belt				
NC-7	1.00	1.00	1.00	1.00
NC-4	1.00	1.00	1.00	1.00
NC-8	0.98	1.00	1.00	0.99
NC-10	1.00	1.00	0.95	0.98
NC-9	0.98	1.00	0.98	0.99
NC-12	0.90	0.87	0.98	0.92
Southeast				
SE-7	0.47	0.57	0.47	0.51
SE-5	0.75	0.83	0.45	0.69
SE-4	0.75	0.62	0.64	0.67
SE-9	1.00	0.91	1.00	0.97
SE-2	0.89	0.94	0.95	0.93
SE-3	0.94	0.92	0.96	0.94

Table 10.--Proportion of sorghum seed which was purchased (rather than home grown) by size of farm and subregion

Region and subregions	Small farms	Medium farms	Large farms	All farms
Western States				
W-7	0.22	0.39	0.43	0.35
W-1	0.09	0.13	0.15	0.12
W-2	0.00	0.17	0.25	0.14
W-3	0.08	0.09	0.27	0.15
Western Great Plains				
GP-5	0.00	0.00	0.02	0.01
GP-1	0.41	0.44	0.57	0.47
SC-7	0.77	0.71	0.72	0.74
Eastern Great Plains				
GP-10	0.55	0.27	0.35	0.39
GP-2	0.33	0.59	0.50	0.47
GP-4	0.51	0.49	0.47	0.49
GP-3	0.74	0.83	0.84	0.80
SC-6	0.28	0.29	0.42	0.33
SC-3	0.75	0.93	0.89	0.86
SC-5	0.90	0.93	0.97	0.93
SC-4	0.95	0.90	0.95	0.94
Western Corn Belt				
GP-6	0.49	0.44	0.56	0.49
Mississippi Delta				
SC-2	0.08	0.20	0.24	0.17

Table 11.--Proportion of barley seed which was purchased (rather than home grown) by size of farm and subregion

Region and subregions	Small farms	Medium farms	Large farms	All farms
Western States				
W-4	0.00	0.00	0.14	0.05
W-5	0.59	0.58	0.47	0.55
W-6	0.45	0.54	0.30	0.43
W-7	0.17	0.22	0.17	0.19
W-1	0.32	0.35	0.60	0.42
W-2	0.17	0.17	0.17	0.17
W-3	0.58	0.18	0.36	0.38
Western Great Plains				
GP-9	0.10	0.19	0.22	0.19
GP-8	0.13	0.12	0.11	0.12
Eastern Great Plains				
GP-7	0.16	0.19	0.22	0.19
NC-1	0.27	0.51	0.41	0.40

Table 12.--Proportion of seed wheat which was purchased (rather than home grown) by size of farm and subregion

Region and subregions	Small farms	Medium farms	Large farms	All farms
Western States				
W-4	0.77	0.77	0.45	0.66
W-5	0.87	0.84	0.73	0.81
W-6	0.71	0.63	0.53	0.63
W-7	0.57	0.65	0.59	0.60
W-1	0.18	0.13	0.12	0.14
W-2	0.50	0.67	0.75	0.64
W-3	0.42	0.36	0.58	0.45
Western Great Plains				
GP-9	0.27	0.24	0.38	0.29
GP-8	0.26	0.30	0.17	0.25
GP-5	0.18	0.16	0.15	0.16
GP-1	0.37	0.17	0.15	0.23
SC-7	0.23	0.24	0.11	0.20
Eastern Great Plains				
GP-7	0.33	0.25	0.34	0.30
NC-1	0.56	0.64	0.60	0.60
GP-10	0.23	0.23	0.11	0.19
GP-2	0.20	0.13	0.02	0.12
GP-4	0.24	0.30	0.23	0.26
GP-3	0.23	0.31	0.31	0.28
SC-6	0.62	0.38	0.36	0.46
SC-3	0.36	0.27	0.45	0.36
SC-5	0.03	0.23	0.03	0.10
Western Corn Belt				
NC-2	0.04	0.11	0.08	0.07
GP-6	0.12	0.05	0.22	0.13
NC-3	0.08	0.02	0.17	0.09
NC-13	0.05	0.09	0.21	0.11
Eastern Corn Belt				
NC-7	0.00	0.00	0.10	0.03
NC-4	0.10	0.12	0.19	0.13
NC-8	0.00	0.00	0.04	0.01
NC-10	0.42	0.43	0.56	0.47
NC-9	0.27	0.025	0.32	0.28
NC-12	0.29	0.41	0.47	0.42
Mississippi Delta				
SC-2	0.20	0.32	0.25	0.27
SE-7	0.14	0.35	0.47	0.31
SC-1	0.25	0.32	0.25	0.27
Southeast				
SE-9	0.13	0.30	0.20	0.21
SE-2	0.11	0.22	0.30	0.20
SE-3	0.04	0.00	0.16	0.07

Table 13.--Proportion of feed grains and wheat that were fed on the farms where produced, by size of farm and subregion

Region and subregions	Small farms	Medium farms	Large farms	All farms
Western States				
W-4	0.00	0.00	0.00	0.00
W-5	0.03	0.00	0.00	0.01
W-6	0.19	0.13	0.05	0.12
W-7	0.00	0.02	0.04	0.02
W-1	0.00	0.00	0.06	0.02
W-2	0.00	0.00	0.01	0.00
W-3	0.00	0.00	0.00	0.00
Western Great Plains				
GP-9	0.23	0.07	0.01	0.10
GP-8	0.09	0.08	0.06	0.08
GP-5	0.18	0.03	0.02	0.07
GP-1	0.04	0.03	0.01	0.03
SC-7	0.00	0.00	0.00	0.00
Eastern Great Plains				
GP-7	0.09	0.12	0.05	0.09
NC-1	0.01	0.01	0.04	0.02
GP-10	0.28	0.26	0.13	0.22
GP-2	0.04	0.07	0.03	0.05
GP-4	0.01	0.02	0.03	0.02
GP-3	0.22	0.09	0.17	0.16
SC-6	0.03	0.00	0.00	0.01
SC-3	0.25	0.09	0.02	0.12
SC-5	0.06	0.07	0.07	0.07
SC-4	0.13	0.21	0.05	0.13
Western Corn Belt				
NC-5	0.54	0.49	0.45	0.49
NC-2	0.25	0.28	0.26	0.26
GP-6	0.35	0.46	0.26	0.36
NC-3	0.57	0.45	0.42	0.48
NC-13	0.66	0.60	0.44	0.57
Eastern Corn Belt				
NC-7	0.52	0.63	0.36	0.51
NC-4	0.54	0.51	0.48	0.51
NC-8	0.53	0.51	0.47	0.50
NC-10	0.45	0.55	0.35	0.45
NC-9	0.29	0.18	0.20	0.23
NC-12	0.49	0.36	0.29	0.38
Mississippi Delta				
SC-2	0.04	0.00	0.00	0.01
SE-7	0.39	0.42	0.14	0.33
SC-1	0.09	0.06	0.04	0.07
Southeast				
SE-5	0.60	0.56	0.36	0.51
SE-4	0.50	0.30	0.27	0.36
SE-9	0.41	0.23	0.23	0.25
SE-2	0.41	0.43	0.23	0.36
SE-3	0.50	0.31	0.31	0.37

Table 14.--Average amount paid for purchased feed by size of farm and subregion

Region and subregions	Small farms	Medium farms	Large farms
		Dollars	
Western States			
W-4	1,120	423	5,388
W-5	2,729	1,322	1,523
W-6	3,151	3,549	9,927
W-7	334	1,594	1,789
W-1	105	4,298	12,304
W-2	0	0	9,878
W-3	4,083	5	21,282
Western Great Plains			
GP-9	5,357	2,674	3,556
GP-8	761	1,444	3,500
GP-5	5,170	6,269	14,815
GP-1	3,610	11,298	15,037
SC-7	4,029	479	1,166
Eastern Great Plains			
GP-7	2,624	4,414	4,214
NC-1	1,541	803	2,189
GP-10	5,877	3,029	96,042
GP-2	2,365	1,888	7,037
GP-4	893	8,631	24,252
GP-3	2,142	2,431	10,058
SC-6	663	3,313	3,287
SC-3	580	2,502	1,274
SC-5	149	1,099	6,608
SC-4	1,122	331	421
Western Corn Belt			
NC-5	3,782	7,406	7,650
NC-2	4,005	7,865	11,382
GP-6	6,480	8,347	6,179
NC-3	6,854	8,362	20,917
NC-13	6,433	10,366	12,612
Eastern Corn Belt			
NC-7	4,202	8,859	10,756
NC-4	5,273	13,518	18,464
NC-8	2,245	7,095	11,247
NC-10	1,030	4,306	3,265
NC-9	1,728	2,581	10,158
NC-12	3,074	1,838	6,482
Mississippi Delta			
SC-2	184	767	165
SE-7	2,000	3,854	12,565
SC-1	1,010	1,573	484
Southeast			
SE-5	600	1,262	3,729
SE-4	877	4,321	1,160
SE-9	1,527	3,098	4,775
SE-2	841	3,410	9,140
SE-3	625	518	4,452

Table 15.--Average amount paid for feeder animals by size of farm and subregion

Region and subregions	Small farms	Medium farms	Large farms
		Dollars	
Western States			
W-4	2,662	9	147
W-5	355	549	1,173
W-6	3,554	1,887	5,906
W-7	0	0	2,609
W-1	662	435	3,104
W-2	0	0	25,036
W-3	696	5,455	2,591
Western Great Plains			
GP-9	2,759	578	13,349
GP-8	136	33	1,439
GP-5	12,095	4,718	14,361
GP-1	8,425	20,624	37,724
SC-7	8,988	1,355	3,012
Eastern Great Plains			
GP-7	1,731	2,457	5,534
NC-1	2,017	313	1,147
GP-10	7,863	5,407	23,307
GP-2	899	8,606	10,809
GP-4	3,714	9,342	41,638
GP-3	4,080	1,915	7,909
SC-6	708	2,984	5,419
SC-3	275	1,307	413
SC-5	74	606	341
SC-4	19	24	746
Western Corn Belt			
NC-5	1,239	4,464	17,445
NC-2	5,792	3,864	15,603
GP-6	3,846	13,558	9,035
NC-3	2,802	7,551	49,731
NC-13	961	4,456	12,014
Eastern Corn Belt			
NC-7	2,709	2,481	8,130
NC-4	4,501	14,367	16,089
NC-8	983	7,518	33,551
NC-10	740	4,672	7,927
NC-9	690	713	20,428
NC-12	337	258	4,639
Mississippi Delta			
SC-2	223	0	0
SE-7	0	1,499	1,510
SC-1	378	2,952	818
Southeast			
SE-5	0	10	5,455
SE-4	528	125	0
SE-9	481	546	1,213
SE-2	129	971	1,304
SE-3	134	15,985	1,521

Table 16.--Bushel capacity of on-farm grain storage by size of farm and subregion

Region and subregions	Small farms	Medium farms	Large farms
		Bushels	
Western States			
W-4	2,846	10,400	25,386
W-5	2,982	9,426	18,088
W-6	6,950	6,298	14,860
W-7	5,527	843	7,170
W-1	468	382	1,111
W-2	4,049	429	652
W-3	79	0	1,245
Western Great Plains			
GP-9	9,102	18,378	49,076
GP-8	10,564	19,868	37,225
GP-5	7,084	17,930	21,863
GP-1	3,862	12,145	26,658
SC-7	23,271	1,898	205,636
Eastern Great Plains			
GP-7	9,924	14,977	41,342
NC-1	9,565	20,944	45,883
GP-10	12,901	11,411	39,021
GP-2	2,296	5,623	9,963
GP-4	2,487	7,645	9,503
GP-3	2,524	5,596	13,560
SC-6	834	1,615	52,847
SC-3	902	12,545	51,847
SC-5	96,842	2,260	46,141
SC-4	190	95	120,689
Western Corn Belt			
NC-5	7,257	11,387	29,614
NC-2	7,294	14,850	28,625
GP-6	7,311	15,262	29,443
NC-3	7,553	11,967	26,800
NC-13	5,576	11,442	30,644
Eastern Corn Belt			
NC-7	7,973	11,021	29,691
NC-4	6,547	13,862	31,037
NC-8	5,059	10,573	27,214
NC-10	4,983	7,296	17,431
NC-9	5,566	12,480	27,117
NC-12	2,960	7,267	16,643
Mississippi Delta			
SC-2	3,238	4,352	8,804
SE-7	783	3,287	14,100
SC-1	1,763	6,333	7,428
Southeast			
SE-5	1,020	926	10,077
SE-4	2,242	1,077	1,646
SE-9	5,709	12,711	14,037
SE-2	1,548	4,530	5,920
SE-3	766	2,466	4,377

Table 17.--Average total charge paid for storing grain off the farm by size of farm and subregion

Region and subregions	Small farms	Medium farms	Large farms
		Dollars	
Western States			
W-4	466	904	838
W-5	1,069	1,845	2,973
W-6	224	308	670
W-7	142	754	1,459
W-1	0	0	32
W-2	65	301	317
W-3	0	0	120
Western Great Plains			
GP-9	43	56	89
GP-8	4	32	50
GP-5	65	234	844
GP-1	149	346	2,082
SC-7	4	24	23
Eastern Great Plains			
GP-7	18	28	50
NC-1	12	25	61
GP-10	113	141	597
GP-2	277	446	1,461
GP-4	311	465	973
GP-3	153	446	463
SC-6	28	186	222
SC-3	64	14	262
SC-5	0	12	1,189
SC-4	11	390	999
Western Corn Belt			
NC-5	27	17	137
NC-2	172	217	293
GP-6	43	127	310
NC-3	78	198	411
NC-13	32	180	173
Eastern Corn Belt			
NC-7	101	150	243
NC-4	135	261	589
NC-8	63	141	298
NC-10	94	183	607
NC-9	272	589	1,290
NC-12	92	244	421
Mississippi Delta			
SC-2	65	1,106	570
SE-7	7	1	165
SC-1	35	75	512
Southeast			
SE-5	5	0	0
SE-4	0	7	0
SE-9	22	65	219
SE-2	19	10	183
SE-3	4	11	163

Table 18.--Gallon capacity of diesel fuel storage by size of farm and subregion

Region and subregions	Small farms	Medium farms	Large farms
		Gallons	
Western States			
W-4	1,521	1,193	1,513
W-5	596	1,233	3,058
W-6	607	705	2,039
W-7	4,900	3,022	3,782
W-1	2,058	3,784	7,550
W-2	3,422	5,625	5,600
W-3	1,846	2,055	7,113
Western Great Plains			
GP-9	448	572	1,262
GP-8	473	627	980
GP-5	637	565	1,790
GP-1	701	783	3,753
SC-7	627	815	1,968
Eastern Great Plains			
GP-7	444	508	1,521
NC-1	326	514	1,209
GP-10	677	421	1,314
GP-2	281	433	1,065
GP-4	260	554	1,102
GP-3	164	323	735
SC-6	213	494	1,168
SC-3	54	382	714
SC-5	274	595	4,590
SC-4	491	496	2,873
Western Corn Belt			
NC-5	168	384	681
NC-2	177	392	772
GP-6	221	402	809
NC-3	276	387	838
NC-13	152	369	710
Eastern Corn Belt			
NC-7	172	277	827
NC-4	113	427	944
NC-8	118	260	1,034
NC-10	135	389	1,230
NC-9	239	552	1,197
NC-12	172	367	734
Mississippi Delta			
SC-2	849	1,197	4,420
SE-7	281	688	3,465
SC-1	565	1,764	5,175
Southeast			
SE-5	100	358	1,118
SE-4	155	528	1,578
SE-9	148	425	945
SE-2	276	484	950
SE-3	356	477	1,981

Table 19.--Gallon capacity of gasoline fuel storage by size of farm and subregion

Region and subregions	Small farms	Medium farms	Large farms
		Gallons	
Western States			
W-4	1,249	845	1,606
W-5	677	931	2,063
W-6	590	797	1,386
W-7	960	898	1,174
W-1	695	1,072	1,429
W-2	1,008	1,654	963
W-3	678	455	1,777
Western Great Plains			
GP-9	449	571	847
GP-8	472	565	719
GP-5	686	560	917
GP-1	625	649	1,547
SC-7	295	303	467
Eastern Great Plains			
GP-7	464	528	1,646
NC-1	466	549	948
GP-10	530	483	537
GP-2	440	801	797
GP-4	356	530	595
GP-3	344	460	1,156
SC-6	110	179	309
SC-3	198	319	455
SC-5	85	263	782
SC-4	372	342	737
Western Corn Belt			
NC-5	380	490	664
NC-2	393	484	566
GP-6	386	418	615
NC-3	391	452	682
NC-13	350	481	670
Eastern Corn Belt			
NC-7	339	418	531
NC-4	385	577	712
NC-8	448	503	926
NC-10	524	439	618
NC-9	398	573	865
NC-12	386	442	660
Mississippi Delta			
SC-2	674	655	1,072
SE-7	328	352	858
SC-1	503	674	1,287
Southeast			
SE-5	155	270	371
SE-4	180	199	322
SE-9	297	449	1,142
SE-2	233	416	743
SE-3	225	236	1,488

Table 20.--Gallon capacity of LP fuel storage by size of farm and subregion

Region and subregions	Small farms	Medium farms	Large farms
		Gallons	
Western States			
W-4	15	0	36
W-5	39	0	47
W-6	0	0	12
W-7	43	60	0
W-1	175	157	567
W-2	203	304	42
W-3	292	455	818
Western Great Plains			
GP-9	51	39	84
GP-8	67	155	73
GP-5	110	247	191
GP-1	528	300	407
SC-7	671	889	804
Eastern Great Plains			
GP-7	92	58	79
NC-1	12	123	212
GP-10	341	344	201
GP-2	162	164	235
GP-4	128	205	259
GP-3	50	183	142
SC-6	361	663	443
SC-3	113	174	146
SC-5	165	227	1,333
SC-4	117	167	
Western Corn Belt			
NC-5	141	231	587
NC-2	148	534	730
GP-6	169	254	512
NC-3	166	181	259
NC-13	73	97	446
Eastern Corn Belt			
NC-7	272	347	1,196
NC-4	140	483	1,186
NC-8	71	433	591
NC-10	56	150	250
NC-9	175	272	613
NC-12	33	200	300
Mississippi Delta			
SC-2	659	438	962
SE-7	23	41	350
SC-1	260	701	1,041
Southeast			
SE-5	42	0	0
SE-4	83	115	136
SE-9	527	620	891
SE-2	255	765	593
SE-3	20	10	122

Table 21.--Average value of shop and shop related equipment by size of farm and subregion

Region and subregions	Small farms	Medium farms	Large farms
		Dollars	
Western States			
W-4	11,038	12,369	12,825
W-5	5,545	6,283	14,514
W-6	7,258	7,985	15,624
W-7	12,496	13,443	20,617
W-1	6,900	10,957	18,950
W-2	7,958	9,979	12,958
W-3	5,942	12,864	14,682
Western Great Plains			
GP-9	4,137	6,078	10,659
GP-8	6,814	6,142	9,418
GP-5	4,245	6,113	5,589
GP-1	3,364	4,302	15,009
SC-7	2,144	5,218	6,447
Eastern Great Plains			
GP-7	2,878	3,432	6,597
NC-1	2,483	4,810	8,562
GP-10	2,009	2,530	6,259
GP-2	2,790	4,649	9,765
GP-4	1,630	2,433	4,068
GP-3	1,179	1,846	2,777
SC-6	879	2,339	3,069
SC-3	545	1,543	1,414
SC-5	883	1,560	6,733
SC-4	3,076	1,390	5,053
Western Corn Belt			
NC-5	3,116	2,211	3,382
NC-2	1,245	1,882	2,628
GP-6	1,125	1,618	3,368
NC-3	2,169	3,017	3,961
NC-13	1,854	1,938	3,959
Eastern Corn Belt			
NC-7	1,847	2,256	4,313
NC-4	1,476	1,935	3,411
NC-8	1,670	1,756	3,780
NC-10	1,350	2,319	5,503
NC-9	1,542	2,443	5,436
NC-12	769	1,013	2,677
Mississippi Delta			
SC-2	3,325	3,702	6,644
SE-7	1,366	2,146	5,706
SC-1	2,169	3,335	8,997
Southeast			
SE-5	467	1,284	5,209
SE-4	1,138	1,908	2,527
SE-9	881	889	1,615
SE-2	721	2,092	3,232
SE-3	564	1,242	3,744

Table 22.--Average number of weeks operator worked off the farm by size of farm and subregion

Region and subregions	Small farms	Medium farms	Large farms
		Weeks	
Western States			
W-4	4.3	0.4	2.1
W-5	3.2	2.6	1.9
W-6	6.6	2.4	4.0
W-7	5.3	0.2	0.0
W-1	2.6	2.3	0.0
W-2	0.2	0.0	0.5
W-3	2.2	7.5	0.7
Western Great Plains			
GP-9	8.1	1.3	4.4
GP-8	6.4	1.9	3.3
GP-5	7.3	2.3	1.6
GP-1	11.9	0.8	1.5
SC-7	6.5	3.8	3.2
Eastern Great Plains			
GP-7	5.4	2.1	1.7
NC-1	6.6	4.3	2.5
GP-10	0.2	2.4	1.0
GP-2	6.9	4.5	2.3
GP-4	14.6	4.9	4.1
GP-3	8.0	4.2	0.1
SC-6	16.3	14.1	3.5
SC-3	11.4	8.1	1.4
SC-5	11.3	9.3	2.1
SC-4	14.0	5.5	3.7
Western Corn Belt			
NC-5	8.3	0.8	1.7
NC-2	8.2	4.2	0.6
GP-6	7.6	2.9	4.6
NC-3	6.4	3.6	1.6
NC-13	5.5	2.2	1.1
Eastern Corn Belt			
NC-7	9.1	2.9	5.3
NC-4	13.7	6.1	1.0
NC-8	10.6	6.6	3.5
NC-10	22.9	11.5	5.5
NC-9	15.2	6.5	2.8
NC-12	13.4	7.0	8.4
Mississippi Delta			
SC-2	0.4	2.6	1.2
SE-7	16.7	5.2	0.7
SC-1	11.2	1.9	1.4
Southeast			
SE-5	7.7	17.2	4.6
SE-4	3.0	14.5	2.9
SE-9	8.8	7.8	2.2
SE-2	10.8	12.7	6.2
SE-3	10.8	0.5	2.6

Table 23.--Average years of school completed by the operator by size of farm and subregion

Region and subregions	Small farms	Medium farms	Large farms
		Years	
Western States			
W-4	12.1	11.6	11.7
W-5	12.1	12.4	12.5
W-6	12.1	12.0	12.0
W-7	11.7	12.7	12.8
W-1	12.4	12.7	12.3
W-2	13.6	13.7	13.7
W-3	13.8	13.9	13.6
Western Great Plains			
GP-9	10.3	10.7	12.4
GP-8	10.3	10.9	10.6
GP-5	11.4	10.7	11.8
GP-1	11.5	11.4	13.0
SC-7	11.5	12.2	15.4
Eastern Great Plains			
GP-7	9.8	10.3	11.3
NC-1	10.2	10.5	11.8
GP-10	10.7	10.3	12.1
GP-2	11.7	11.6	11.9
GP-4	11.8	11.8	12.7
GP-3	11.5	11.2	12.2
SC-6	10.3	11.3	12.8
SC-3	9.2	10.1	11.1
SC-5	7.9	10.6	11.6
SC-4	11.2	9.2	12.1
Western Corn Belt			
NC-5	9.8	10.2	11.1
NC-2	10.7	11.4	11.0
GP-6	10.5	11.3	12.1
NC-3	10.2	11.1	11.5
NC-13	11.2	11.5	11.9
Eastern Corn Belt			
NC-7	10.5	10.6	11.5
NC-4	11.1	11.7	12.1
NC-8	10.9	11.1	12.9
NC-10	10.4	11.3	11.6
NC-9	11.0	11.3	11.6
NC-12	10.4	11.0	11.1
Mississippi Delta			
SC-2	10.1	13.3	11.6
SE-7	10.2	10.7	11.4
SC-1	10.1	11.3	12.6
Southeast			
SE-5	8.8	10.3	13.0
SE-4	9.7	10.3	9.8
SE-9	10.2	10.2	11.1
SE-2	9.6	10.9	11.5
SE-3	8.8	9.4	11.5

Table 24.--Percent of total farm land which was rented by size of farm and subregion

Region and subregions	Small farms	Medium farms	Large farms
		Percent	
Western States			
W-4	57	61	52
W-5	43	62	51
W-6	25	21	23
W-7	42	53	62
W-1	33	55	52
W-2	48	66	70
W-3	28	53	48
Western Great Plains			
GP-9	29	31	43
GP-8	22	36	43
GP-5	28	54	38
GP-1	52	54	53
SC-7	46	77	60
Eastern Great Plains			
GP-7	28	39	41
NC-1	33	43	60
GP-10	33	49	52
GP-2	50	58	64
GP-4	50	52	55
GP-3	41	55	64
SC-6	32	48	56
SC-3	49	69	65
SC-5	38	57	42
SC-4	72	81	67
Western Corn Belt			
NC-5	34	42	43
NC-2	45	63	65
GP-6	47	51	64
NC-3	42	56	59
NC-13	17	40	39
Eastern Corn Belt			
NC-7	23	41	49
NC-4	27	51	57
NC-8	19	48	43
NC-10	12	35	43
NC-9	46	67	71
NC-12	30	48	60
Mississippi Delta			
SC-2	40	64	64
SE-7	20	41	54
SC-1	51	58	47
Southeast			
SE-5	2	5	33
SE-4	32	58	61
SE-9	16	42	65
SE-2	21	30	36
SE-3	26	45	55

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